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ABSTRACT

An integral part of the educational leadership program at Auburn University is the Doctoral Educational Leadership Program, which began in 1989 to allow part-time doctoral students to gain full-time residency status. The program has evolved since its beginning. This paper presents the theoretical frameworks used to restructure the educational leadership program and its component, the doctoral seminar. The frameworks are structured and presented using the leadership frames of L. Bolman and T. Deal (1993) and the five disciplines defined by P. Senge (1990). Reflective journaling practices of cohort members and other artifacts are used to provide evidence of how the cohort and its members operate. The frames through which the program is examined include: political, structural, human resource, and symbolic. The application of the theory involved in Senge's Five Disciplines is reflected in students' own areas of recognition, retrospection, exploration, and creativity as evidenced by their projects such as expectations for professional visioning, journal reflections, and mentoring plans. Each student's individual project echoes his or her personal growth, mental processes, shared vision, and thinking capacity. (Contains 36 references.) (SLD)

# Theory, research, and practice: Bridging the gap in a doctoral candidate seminar.

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Abstract

A brief overview of the strategies used to create the "community of learners" at Auburn University's Educational Leadership Program will be given. Members of a leadership doctoral seminar cohort, will share research findings concerning mentoring, mental models, and reflective practice. Content analysis of cohort documents, artifacts, class meetings and gatherings, and interviews was used. Findings indicated that mental models are a powerful, proactive tool for those in leadership positions. Critical reflections, through journaling and other means, help to clarify assumptions, attitudes, and to clarify purpose. While most situations appear to be a combination of several frames, symbolic frames can be a strong indicator of an organization's culture.

## Introduction

Transformative leaders and organizations demand critical reflection. They require participants to construct meaning from their surroundings by creating mental models (Weick, 1995; Schon,1983; Senge,1990). They require members to create a community supportive of learning (Sergiovanni, 1994). In essence, they require us to view our organizations in a pro-active way, assuming moral responsibility for our environments rather than waiting for "IT to run US" (Sarason, 1990; Sergiovanni, 1992).

In 1996, Auburn University's Educational Leadership Program was restructured and described as "A Journey from Organization to Community"(Kochan et al., 1999). Guided by transformative leadership theory, approaches bridging theory, research, and practice were instilled into the program. Starting with the formulation of basic assumptions and moving to creating a shared vision, mission, and model, participants of the revisioning process infused a "linear organization" into a "community of learners".

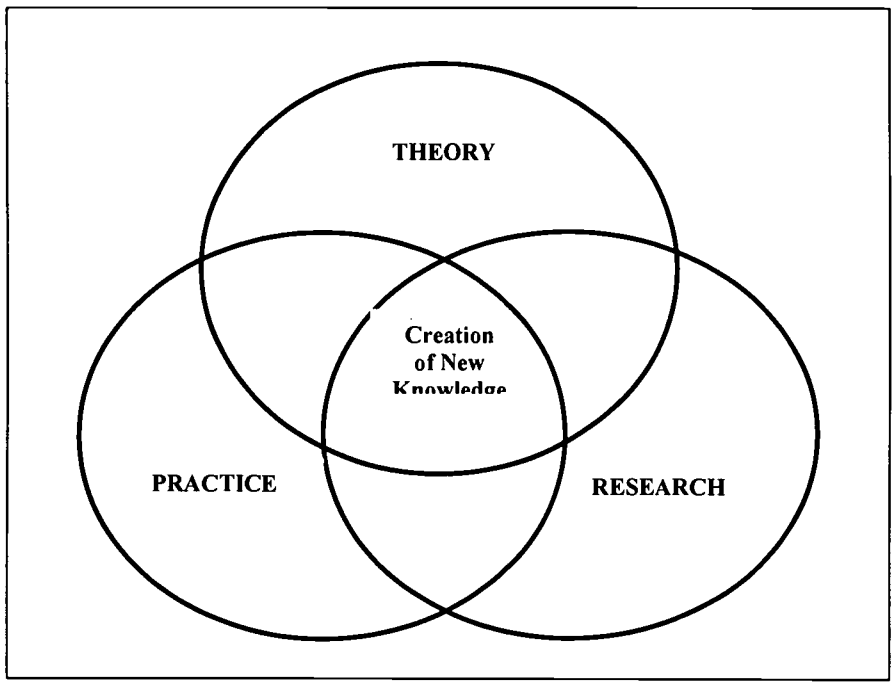
In restrucuring, the following assumptions were identified:

1. Adult learners bring a wealth of knowledge to the learning/schooling task which should be shared and honored.
2. Change is the only constant.
3. Educational leaders of the future must be reflective, collaborative and adaptive, able problem solvers in diverse and varied settings
4. Educational leaders of the future will be faced with increasingly complex roles which necessitate leadership skills which differ from those of the past.
5. Educational leadership programs must be flexible and dynamic to meet the needs of a changing society and educational leaders.

6. Educational leadership programs should model what they teach and practice what they preach (Kochan, et. al., 1999).

Implementing the program's new vision, mission and model ensued. In a visual representation, Figure 1, members of the Auburn University Educational Leadership Department described a Venn Diagram with overlapping areas between theory, research, and practice. At the core, where all three overlap, is the formation of new knowledge. In other words, new knowledge is created from textbooks, experts, and scholarly publications as well as hands-on experience and participation in leadership activities.

Figure 1. Venn Diagram



## The Research Base

The guiding metaphor, "creating a community of learners", was supported by a research base rich with transformative leadership and organizational theory. Sergiovanni's (1994), and Kowch's and Schweir's (1997), idea of learning community suggests that we should look at our school institutions not as organizations but rather as communities where the emphasis shifts from control to the development of shared values, core beliefs, and community norms which will bind the institution. It then becomes possible for students to model what is before them. More importantly, it becomes possible for students to acquire these "community" practices and transform their institutions.

With this in mind, attention was given to improving curriculum and instructional strategies through problem-based learning, reflective journaling, collaborative projects, action and applied research, reflective practice, opportunities for open dialogue, cooperative learning, and mentoring. Secondly, program crafters wanted to create "community" through cohorts. Finally, they wished to fashion activities to enhance communication among and between various stakeholder groups (Kochan et al., 1999).

In addition to the "community of learners" framework, other transformative theory was relied upon. Senge's (1990) five disciplines: personal mastery, mental models, shared vision, team learning, and systems thinking also influenced the thinking and planning of the educational leadership program development. His first discipline, Personal Mastery, lets one gain a deeper sense of self. Individuals develop patience, see situations more objectively, and focus their energies on what they value most. It becomes a quest for continuous learning. The second discipline, Mental Models, are defined as

"deeply ingrained assumptions, generalizations, or images that influence our view of the world and the actions we take" (Senge, 1990, p. 8). Through inquiry, dialogue, and reflection, our mental models can be more clearly defined and visualized. The third discipline, Shared Vision, offers members of a community a group set of guiding principles and practices. These serve to bind the group together towards a common purpose. Dialogue, working together, and being involved brings a joint commitment to the central vision. The fourth discipline, Team Learning, begins with open dialoguing and the recognition that certain patterns can be counterproductive to the group and the community. By listening and sharing thoughts in an environment free of criticism, members can develop a process of thinking together. The fifth discipline, Systems Thinking, offers us a view of working together as interrelated parts of a much bigger whole. It views both individual effort and group effort as interconnected. It relies upon feedback and ongoing assessment to make the learning organization better but never complete.

Hargreaves (1995) believes that reculturing must exist before collective action and dialogue can take place. He suggests that emphasis be placed on collaboration and establishing climates of trust. This challenges traditional top-down instructional practices that take place in many K-12 and university environments. Freire's (1970) notion of dialogue between student and teacher, where both are equally learning from each other, supports this. Following this line of thought, the "community of learners" becomes a network of learners where professors and students come together to support one another and learn from one another.

In addition to the above, other theoretical lines have been added. Two in particular are Bolman's and Deal's (1993) four leadership frames, and Kochan's and Trimble's (2000) non-traditional, co-mentoring framework. The four leadership frames described by Bolman and Deal (1993), political, structural, human resource, and symbolic encourage the participant to view situations through multiple lenses. These lenses allow a clearer understanding of complex or unfamiliar situations. While most life situations are a mixture of several frames, sometimes one frame appears more important than the others. The political frame suggests power, and the need to control limited resources. The human resource frame highlights the importance of needs. It suggests that organizations work best if individual needs are met and people feel they are working in a caring, trusting environment. The structural frame suggests production, a clear sense of purpose, and unambiguous goals. The symbolic frame centers on symbols, meaning, and faith. Ceremonies, rituals, metaphors, stories all serve an important purpose in the symbolic frame. They are the zest.

Kochan and Trimble (2000) suggest a rather non-traditional mentoring framework. Instead of a traditional, linear approach, the authors suggest the relationship become one of mutual growth and interaction. In most models, one seeks knowledge and the other is the "giver" of all things important and true. Instead, each participant learns from the other. Together, they form a powerful team, which creates a win-win situation for professional advancement.

## Auburn University Educational Leadership Seminar

An integral part of the university's educational leadership program is the Doctoral Educational Leadership Seminar. It began in 1989 as an effort to allow part-

time doctoral students to gain full-time residency status. Students attended seminar classes for five succeeding quarters, beginning in the summer and ending the next summer. Seminar's original aim was to increase collaborative student practices and to allow those in the leadership doctoral program to learn from the experiences of other seminar members.

It, like other aspects of the leadership program, underwent content and contextual changes resulting from the departments restructuring. Further research in 1998, focusing specifically on the students' doctoral seminar experience from 1992-1997, reinforced the need for content and contextual changes (Kochan, et al., 1999). As the doctoral seminar was fashioned, some very clear goals emerged: 1) professional and social integration 2) working in collaborative teams 3) enhancing professional knowledge through structured inquiry 4) learning from other leaders 5) engaging in intensive research activities and 6) building upon already established goals.

Each semester the above goals are emphasized through the use of various projects and activities. Cohort members have been asked to attend conferences which focus on presenting and doing research. They have been asked to coordinate guest speakers for particular topics of study. Cohort members developed professional visioning statements and created individual portfolios demonstrating this vision. The members have been asked to attend celebrations such as an Auburn University dinner honoring former Alabama State Superintendent Wayne Teague. Mentoring plans were created and progress of the mentee-mentor relationship was reported over several semesters. Several seminar sessions have been held off campus at other university settings to expose cohort members to surrounding institutions and their leadership practices. One such meeting

was held at Tuskegee University where members were engaged in leadership conversations with university officials and toured the campus. Topics for dissertations, scholarly research practices, and research proposals were also included during a semester of the doctoral seminar. Each seminar group is asked to complete a "community of learners" project dedicated to expressing their solidarity as a group, working as a team, and fostering the exposure of the Auburn University Educational Leadership Department as a transformational organization. One such project was a cohort cookbook.

Cohort Members

Cohort members come from various professional backgrounds. These include: K-12 educators, college and university professionals, nurses, military officers, and technical and vocational educators. While coming from a variety of career paths, they all have a common goal: receiving a doctorate degree in educational leadership from Auburn University.

## Purpose

The purposes of this paper are: to present theoretical frameworks used to restructure the educational leadership program and one of its primary components, the doctoral seminar, and to demonstrate and share meaningful content and contextual experiences of doctoral participants. These frameworks will be structured and presented by use of Bolman's and Deal's (1993) leadership frames and Senge's (1990) five disciplines and will include metaphors to describe what the cohort is and reflective journaling practices and other artifacts to evidence how the cohort and its members operate. In conclusion, it is hoped that a stimulating dialogue among colleagues as to

how transformative leadership and organizational theory can be more comprehensively connected to leadership programs and practices will ensue.

## Methods and Data Collection:

Content analysis of cohort documents, artifacts, class meetings and gatherings was done. Several interviews with faculty and participants were also included. Several themes emerged from the analysis.

## Frames We Live By: Framing the Community of Learners

### Introduction of Frames

Members of Auburn University's educational leadership program at the doctoral level have created a new framework for learning and sharing knowledge, experience, and support. This framework is shared among the doctoral candidates in the form of series of core classes called "Doctoral Cohort." These cohort classes engage individuals to participate in a group setting where the members that start the cohort together stay with each other during the series of follow-on cohort classes—and, they solidify into an interdependent team of mutually supporting friends and colleagues.

The philosophy of cohort is quite different than a traditional college class. Each member's role within the group is not defined as student, teacher, coach, mentor, etc., instead, each member fulfills all of these roles and much more. Within the cohort, students are not just receptacles of knowledge they are interdependent team members that are creators of knowledge. Using Schubert's (1986) description, they are people who, "interact with their environment, derive knowledge from it, and use that knowledge to [further] contribute . . ." (p. 178). "While students, faculty, and mentoring practitioners create new knowledge, all are also obliged to disseminate that knowledge with members

of the learning community" (Twale, et al., n.d., p. 12). Therefore, the cohort is referred to as the "Community of Learners."

The purpose of this section of the paper is to capture the essence of the educational leadership doctoral cohort. In order to do this, this essay will describe the doctoral cohort experience as viewed through Bolman's and Deal's (1993) four leadership frames: political, structural, human resource, and symbolic. Furthermore, this essay will put forth metaphors within each frame to "highlight and make coherent our...activities . . ." (Lakoff and Johnson, 1980, pp. 232-233).

The Political Frame

Any time people come together to interact, whether it be in a college class, a factory, or a party, their activities are influenced by political forces and they act within the political frame. When referring to the political frame, it brings to one's mind thoughts about power, whom among the group holds the power, and how competing interests are tabled so that someone with ultimate power over the group can chose the priority of those interests. This is true for the members of the doctoral cohort who come together as a result of prior planning by the cohort professors and the academy in general. As a starting point, when each new seminar begins, by default the professor is the ultimate holder of power. At this point, students see the professor as the class authority and the one with the power to assign a desirable final grade. The political framework of the doctoral cohort, however, does not continue to follow this typical power-to-powerless relationship. Within a few minutes of the start of the first class on the first day of doctoral cohort, students realize that each of them share a power-among-equals relationship, a collegiality among cohorts. The professor empowers students to also be

professors and mentors to the group and to rely on and share their own personal experiences, values, and beliefs to enhance the group's understanding about a wide range of educational and leadership topics.

The relationship between cohort students and their professors is best described by metaphor. Metaphorically, the professor is a tour guide, not the king or queen of the class. Each student in the class may have an idea of his or her final destination but enlists the help of the tour guide for tips about the terrain, landmarks, directions, alternative paths, how to secure transportation, how to learn and cope with the local culture, and so on. The tour guide's tasks may range from occasionally providing detailed instructions to just listening to an individual think aloud about his or her ideal trip. The tour guide is experienced and knows the lay of the land, and, the tour guide consults all members of the class to raise the level of awareness about the trip and destinations. Therefore, the political frame in cohort does not adhere to the normal idea of having authority concentrated at the top with lower-level members competing for scarce resources and power.

The Structural Frame

Members of the cohort work within a structural framework. Within this frame, structures serve to facilitate the organization's operation. The structural frame "emphasizes goals, specialized roles, and formal relationships. Structures . . . are designed to fit an organization's environment . . ." (Bolman & Deal, 1997, p. 13). Many elements of each cohort class are structured and carefully planned prior to the course start date. These include a time, date, and location for the first meeting, specific assignments and tasks that should be assigned or negotiated among cohort members, and overall

goals. When the cohort class meets for the first time, more structural aspects are negotiated, not directed. Cohort members agree upon which dates and times best fit their schedules for future meetings. Members discuss and agree upon locations for the meetings and individuals within the group take on specialized roles to coordinate with outside agencies so that meetings can be held in special off-campus locations that enhance learning, sharing, and socialization. Cohort members discuss the goals and determine structures to meet those goals, including the coordination of guest speakers for future classes.

One structured activity decided upon by the group member is a "Community of Learners" project. This project has several aims. It cultivates cohesion within the cohort and compels members to work together as a team to accomplish the project successfully. It also obliges each member to emerge as a leader for some part of the project. Finally, it gives to the community—this is a community service project—it allows cohort students to use their special talents while building a sense of community. A specific example of one community of learners' project will be discussed latter in this essay.

The structural frame concept of the cohort is best described by metaphor. Metaphorically, the cohort's structural framework is as a three-dimensional jigsaw puzzle of a city block. The ground-level outside frame that delineates the physical borders of the cohort, and therefore the puzzle, is provided by the prior planning and guidance of the academy and cohort professors. However, each member of the cohort fashions how his or her part of the puzzle interlocks with the other pieces. Each member decides what type of building (or structure) he or she will contribute to the city block and how that building will co-exist and function to enhance the overall design and purpose of the

puzzle. Some buildings are tall and impressively captivating while some are observed by the casual onlooker as small but in fact have huge underground basements that house wonderful treasures that are readily and freely shared throughout the community. Some buildings have very specialized functions such as a fire station or a city hall while others are multi-facetted such as a shopping mall or a flea market. The end result is more than just a city block, it is an interdependent community where the talents of each component are multiplied when used in combination with the talents of the group; it is a community of learners.

The Human Resource Frame

Members organized into the educational leadership doctoral cohort work within a human resource frame. "The human resource frame...sees an organization as much like an extended family, inhabited by individuals who have needs, feelings, prejudices, skills, and limitations" (Bolman & Deal, 1997, p. 14). Therefore, the metaphor for this frame is apparent from the outset, the cohort members are as siblings within a family.

Metaphorically, and as stated earlier, the cohort family members that start the cohort together are kept together as a group in the follow-on cohort classes that extend for over one year—this builds the relationship into a cohort family of siblings. Over the course of time they are together, siblings learn each others' strengths and weaknesses. Siblings share honest feedback with each other about their performance during presentations and leadership tasks that are carried out on behalf of the group. Journaling becomes an important avenue of expression and reflections are shared among the cohort so members can learn, comment, and even disagree with stated points of view while offering alternative reasonings. This type of healthy disagreement is only possible

because of the closeness of family members—the family depends upon open and honest dialogue in order to mature. Each sibling compiles an autobiography with artifact evidence that increases a self-awareness and group-awareness about who the individual is, where he or she has been what he or she has done, and what he or she desires to do. Artifacts also serve to remind the family about the talents each individual member brings to the cohort and how each individual member's strengths are important to the family. Over time each family member matures and often models himself or herself to exhibit the desirable traits and strengths of other siblings within the family. In fact, siblings mentor each other both informally and formally and a major portion of the cohort experience is for each member to seek out mentors that facilitate personal and professional growth and to identify personal and professional goals and to formulate a formal mentoring plan; therefore, each family member must think about what he or she wants to do upon growing up and moving out from the family. Siblings also learn how to employ the family as a social support network, the cohort and the family never ends. One may grow up and move away, but he or she can always call on a sibling for support and is always available when a sibling needs support. Members of a family continue to forever respect the family and to help family members be successful.

The Symbolic Frame

Another important frame from which cohort members operate is the Symbolic Frame. According to Bolman & Deal (1997, p. 14), "It sees organizations as cultures, propelled more by rituals, ceremonies..." and so on. This frame deals with traditions, beliefs, and symbols that create emotional connections. According to Bolman & Deal (1997), leaders can use this avenue to create a sense of community. As simple as it

sounds, having potlucks, holiday parties, game-day get togethers and so on, serve as effective ceremonies that bring the individuals together as a team of associates, colleagues, and friends.

The relationship among cohort members (all cohort students and professors) is best described by metaphor. Metaphorically, the cohort is a collaboration of comrades. These comrades approach each class assembly not as a mandatory meeting but rather as a social reunion of friends. Comrades prepare and bring everything from main-course dishes to snacks, deserts, and drinks for the meetings. They save up their best jokes to tell in the gathering. These comrades even plan a host of social activities outside the class time so they can spend more time together—the cohort members become best friends.

Cohort friends work with each other to establish their identity within the community as contributors. The doctoral cohort for 2001-2002 did this by centering their community of learners project around the social interaction of cooking. Cohort comrades pooled, tested, and shared their favorite recipes. These recipes were skillfully compiled into a professionally designed cookbook entitled, *Community of Learners Cohort Cookery: Auburn University's Food for Thought* (2002). Once the cookbook was back from the printers, the comrades divided the books among themselves and fanned out to share the workload of selling them. Through their collaborative work, nearly $1500.00 was raised and all the profits for the cookbook were donated to projects underway to benefit the local community.

It is often easy to recognize individuals who are cohort comrades. This is because they eat together, have socials together, learn together, assist the community together, and

even take trips together. Recently, comrades (students and professors) in the 2001-2002 doctoral cohort, coordinated a trip to attend the annual American Education Research Association (A.E.R.A) conference. While there, comrades attended seminars and shared their days and evenings together. And again, Auburn University cohort comrades were easy to recognize: while not attending meetings, they all wore the same style Auburn University shirts. And, thanks to planning by one of the cohort professors, each shirt had printed upon it the words, "Doctoral Cohort, 2001-2002"—comrades cheerfully came together under this banner and were proud to display their membership within the group.

Multi-framing

It is easy to see that the activities shared by doctoral cohort members can be straightforwardly framed under Bolman's and Deal's (1993) four leadership frames. However, leadership and social interaction among people is never isolated within a single frame. When peering into the political frame to see that the professor's authority is structured so it is delegated in a way that empowers all class members, what we see is more than the political framework, we also see the structural framework. The structural framework shows an organization with a flattened organizational chart where the tour guide and the tourist are nearly equal stakeholders of the cohort. Together, classmates and faculty navigate the process of creating knowledge and becoming architects of their structure for building the community of learners. And, like a three-dimensional jigsaw puzzle of a city block, the members of the cohort are interlocked, politically and structurally. Within the structure, each member has specialized roles and responsibilities and each provides support for the other and for the cohort as a whole. Therefore, one cannot look purely at the political or structural framework of the group without detecting

that much of the leadership strength of the group lies in the human resource frame. The cohort's political interaction and structural support binds them together as a cohort family of siblings. Within the family of siblings, the flattened organization promotes lateral lines of communication that are key to making things happen at the lowest level through friendly ideas and common interests—often times, much more can be accomplished much quicker and easier by using this informal structure than using formal structures often associated with traditional college courses. Of course, just as siblings often share the same family name as a symbol of their blood relationship, these cohort comrades also are symbolically bound together as friends. They proudly wear tee shirts with their cohort logo so all can notice that they are all comrades together—all taking the journey with their expert tour guides, all taking part in an evolution of structure that will influence how and where they make their contributions to the community, to the family, and to their friends.

Summarizing the Cohort Through Frames

The Auburn University doctoral cohort for the educational leadership program is not a typical graduate class where students show up on time, draw knowledge from the professor, do assignments, and then go back home to their individual lives. Rather than that, the cohort classmates organize the class, draw knowledge from each other, and become a part of each other's lives. Rather than requiring rigid assignments as milestones of students' personal accomplishments, professors encourage innovation, risk taking, decision-making, and group interaction to accomplish group goals. This is not to say that the course requirements are weak or not well thought out—quite the contrary. The professors act as skillful tour guides to ensure all students experience the necessary

elements of the trip. The trip is centered around individual and group tasks, a community of learners project, reading, reflection and journaling, autobiographical artifacts, leadership studies, individual and group presentations, building a personal mentoring plan, and learning how to lead one's peers. The cohort is not just a class, it is a relationship. It is a relationship among key stakeholders on a knowledge expedition with expert tour guides; it is a relationship among key interlocking and specialized pieces of a three-dimensional puzzle; it is a relationship of siblings with a common desire to see their family succeed; and, it is a relationship of lifelong friends engaged within a community of lifelong learners.

## Reflections: How they inform research, theory, and practice

### Introduction of the Disciplines

The doctorial cohort program started in the College of Education, Auburn University, in 1989. The purpose of the program is "aimed at increasing collaborative practice for students and creating a cohort structure that would allow students to learn from one another" (Kochan, n.d.), and to develop the sense of "a community of learners" (Kochan, n.d.). One of the goals (purposes, objectives) in our recent doctorial cohort program is to inform students about the theoretical perspectives, to enhance their intellectual recognition and comprehension of specific theories, and to develop their ability to apply and to reflect on their real life situation practice as well as their creative thinking. One of the theories students have learned is Senge's five disciplines (Senge, 2000). Students reflected this theory on their thought, vision, and their application by creating their own artifacts, nourishing their mentor-mentee relationship, and developing their sense of the learning community.

Research Questions

Based on the goals of theoretic perspective recognition and creative and practical application, this portion of the paper will investigate two questions about the doctorial cohort program:

1. How does the program construct the theoretical perspective for doctorial cohort students' practices?
2. To what extent do students reveal their theory recognition and reflection on their real world application?

Theory Perspectives

Senge's the five disciplines are personal mastery, mental models, shared vision, team learning, and systems thinking (Senge, 2000). The first three disciplines stress more aspects on individual learning and growth, and the last two have more concentration on group, community, and organizational development.

Reflection and Application

Theory is refined from practice; one of the characteristics of the refined theory is its universality, its ability to apply back to society and directs practice. Through different practices in different situations, theory is further developed and refined. There are many ways to put a theory into practice as evidenced by the diverse application executed by our cohort members. The cohort doctorial students are from different educational institutions (elementary teachers and principle, middle school teachers and technical coordinator, public and private schools, college and institute staff, civilian and military, full time graduate students, domestic and international students), each has different work and personal experiences. The students applied the five disciplines into their own practice

through cohort projects such as artifacts, journal reflections, educational and leadership philosophies, and mentoring plans.

Personal Mastery

According to Senge, "Personal mastery is a set of practices that support people—children and adults—in keeping their dreams whole while cultivating an awareness of the current reality around them. This dual awareness—what you want and what you have—often creates a state of tension that, by its nature, seeks resolution" (2000). Personal mastery is a dynamic intellectual engineering and psychological design of a person's self-implementation (actualization). It is an endless revision and growth of a person's vision, current reality, and creative tension. A personal vision is the mind scope reflection beyond the current situation; and, a creative tension is every effort a person makes with failure, challenge, perseverance as well as confidence to reach his/her vision.

It is helpful for reflection purposes for one to document his/her successes and failures along the way. The collection of this evidence is called artifacts. The artifacts each student assembled specifically revealed his/her path of where he or she was, what he or she has done, and how he or she reached goals. These artifacts are not just symbols of achievements, they represent the overcoming of challenges, learning from failures, and applying life's lessons in their journey from where they were to where they are. More importantly, this project elicited the students' farther visions and higher-level goals. One student is from China. This student's artifacts told her life story. During her formative years she experienced the devastation of the Cultural Revolution and the related disasters of autocratic leadership as well as the desolation to education. After she graduated from a college in China, she wanted to get a piece of clean land by selecting to work in a

depressed inner-China province. Her actions were according to one of the Chinese sayings that "the emperor lives far away as the sky." Although she tried her best to teach there and got rave reviews from students and faculty, she could not come out from the shadow and the rope of the autocratic policy and system. Finally, she came to America for her dream. In the environment of a democratic society, she breathed the air of freedom, heard the voice of human rights, observed American faculty and students' openness of thought to academics, and experienced the enrichment and multiple perspectives of education. Although her metaphor to herself is not a big tree, but a tiny grass, she feels she finally found her niche with sunshine and abundant rain, with love and respect, with understanding and encouragement. Another cohort student is from a local middle school. Her artifacts revealed her long tenure in education. She has been an educator for more than 27 years as a teacher, instructional technologist, workshop trainer, and grant writer. In facing the changing world, especially the reformation times, she uses her spare time in the doctorial program preparing her for better service to her school with updated educational technology. When the students shared their experiences with each other in their session, a student described this seasoned educator as a candle: lighting the students and burning herself.

On the way students started to learn Senge's (2000) Five Disciplines, the instructor in the cohort section asked each students to stand in front of a mirror and to ask himself/herself who he/she is. This activity once more brought students to a deep thought and re-recognition of themselves; meanwhile, each of the students recognized where he/she was and where he/she will and should go. They proposed to themselves a set of espoused goals with a short-term and a long-term plan on how to reach their goals. Most

students planned to obtain their academic degrees in a short time and treated it as the priority. Concerning their long-term plans, some students wanted to get promotion from assistant principle to principle; some wanted to get a position to teach undergraduate or graduate students; some wanted to be a president of student affairs; and some wanted to focus on research and have more papers published.

Mental Models

Mental models means, "Our behavior and our attitudes are shaped by the images, assumptions, and stories that we carry in our minds of ourselves, other people, institutions, and every aspect of the world" (Senge, 2000). Mental models videotape human beings' mental processes of their assumption(s) and conclusion(s) about any specific situation or event or phenomenon that they face in their lives. But these assumptions and conclusions are from "raw" or untested data. For example, a student was late for his class one morning. When he came in class with an angry face, the instructor asked him the reason. He said that when he tried to get his breakfast at a local fast-food restaurant (a well-known national chain), the cashier refused to take a one hundred bill as payment (he didn't have a smaller denomination); the restaurant did not take credit cards either; so, he wrote a check to them, and the cashier asked him to show his ID, social security number and drive license number. Because he was in a hurried mood to catch up with the morning class, the restaurant requirement irritated him. He came to the class and concluded that what happened to him was a case of racial discrimination. But the true fact is that most fast-food restaurants don't take hundred dollar bills as cash because there is a higher incidence of fake bills of this denomination, they don't take credit cards because it requires the restaurant to pay extra money to the credit card company. They only take

checks and small bill cash. They do ask all customers to show an ID, and include their social security number, and/or driver's license number on their paycheck to secure their business. This student's assumption was probably wrong but since he didn't know the rules of that fast-food restaurant, his mental model of racism emerged. In facing the reality of the human mental process of forming assumptions and conclusions, Senge (1994) shows three ways of this process by using the ladder of inference:

1. Become more aware of your own thinking and reasoning (reflection).
2. Always make your thinking and reasoning more visible to others (advocacy).
3. Inquire into other's thinking and reasoning before making assumptions (inquiry).

Bennis(1994) states that "true understanding comes from reflecting on your experience." This is in line with another of the cohort's application of Senge's (2000) Five Disciplines—the cohort students' journal reflections on mentoring. The research on the mentor-mentee relationship in education has a long history, and it is well known that the term and the anecdote "mentor" originally comes from Homer's classic, "The Odyssey," where Odysseus, went off to war, and chose "Mentor" (who was the goddess Athene in the form of Mentor) to protect and advise his son "Telemachus." This was translated later as an "experienced and trusted adviser"(Oxford Dictionary).

We in the cohort read a lot of recent research on mentoring in education. This research included information about preservice teacher and mentoring (Linder & Foote, 2002; Podsen & Denmark, 2000; Wang, 2001), educational leaders and mentoring (Rowley, 1999; Bolman & Deal, 1993; Kochan, 2000), female administrators and mentoring (Funk & Kochan, 1999), and mentoring and professional development

(Galbraith, 2001; Campbell, 2000; Garvey& Alred, 2000; Kochan & Trimble, 2000). However, little research has been done on mentoring in doctorial cohort programs. As was mentioned before, students in this program have different backgrounds and are from different institutions. Therefore, each of them has his/her personal mentor/mentee experiences and it was very valuable for them to share with each other about their experience concerning the mentor/mentee relationship and to further improve their mentor/mentee interrelationship for their continuous professional development.

One student reflected in her journal that the mentor program in her school system has played a role of a "win-win" situation because their mentoring resources are not only the school teachers, but are also retired professionals, and business men in the school district. She wrote that, "the children are so proud to say that they have a mentor, especially the boys who have a man as a mentor and have no father figure at home." Another student was a technological coordinator in a local school. She was interested in electronic mentoring program and she believed that telementoring could assist in structuring on-line collaborative learning efforts to insure a positive experience for all contributors.

**Another cohort student read a journal article (Darwin, 2000) about the mentor/mentee relationship from the functionalist perspective and humanist perspective. After review and critique of the article, she came out with her own perspective and mental model of what the interrelationship was between the mentor and mentee:**

Influenced by pragmatic, practical and emancipatory theory, I am an open-minded person to any forms of mentoring. No matter where I go, or any new environment, including a new school to learn, new job, new community, new place to travel, I like to seek mentors for help. At the same time, I like to help those looking for help that I think I have the ability to give help. So my points are: mentors should possess expert knowledge no matter if they are older or younger than I; The mentors I am looking for should have

similar character with me, at the same time, I should learn to tolerate the characteristics that I don't own; mutual respect is based on my prior respect; interdependence should be set up on the base of my motivation and creativity; colleague and peer relationships rather than hierarchical; more mentors are better than fewer.

| | |
|---|---|
| **Actions** | "If there are three people among us, at least one of them is my teacher." To treat each person around you as your mentor. |
| **Beliefs** | To respect each person around you, and each of them will be your mentor in your learning and your work. |
| **Conclusions** | People like to help those around them as long as they need help, mentoring is a effective way and a nonorganization way for people of different ages, experiences, cultures, to learn from each other to develop the mutual growth. |
| **Assumptions** | The more mentors you have, the more you will make progress in your work, and the more friends you will have in your life. |
| **Affixed meaning** | Through a few times talking and working together, you feel they are the people that are excellent for mentoring, and explicitly express your feelings with your mentors. Your mentors feel that you are the person that could help them in their work. |
| **Selected data & experience** | To have a one-on-one talk with the people you feel that you will have a commonality with; to express your thought and need for help with these people and listen to their reaction. |
| **Real data & experience** | Watch, visit, and try to talk with different people while listening to their opinions." |

By reviewing individual students' journal reflections, we can tell that the features of theses reflections were not only at the still point of their understanding, but also they exposed their creativities.

Shared Vision

Different scholars define vision from different perspectives, but they all come to a common core of vision. MAXXIS Company (2000) defines that a vision is, "The ability

is to see beyond the probable, by envisioning the possible; a state of affairs that you desire to bring about and believe in. The act of dreaming without restriction opens up possibilities that you could not have, or would not have, considered before." Nanus's (1992) definition is that "a vision is a realistic, credible, attractive future for your organization." Based on the core component of vision, Senge's (2000) shared vision brings "all of these disparate aspirations into alignment around the things people have in common—in this case, their connection to a school." Shared vision is a holistic, multidisciplinary approach for personal and organizational development. Furthermore, it reveals the characteristics of trust, openness to community members; illuminates the tolerance for multiple viewpoints and diverse perspectives; reflects the democratic spirit to energize social, cultural, and educational renewal and transformation. Under these perspectives, shared vision means shared common expectations with your colleagues and your organization.

When students started to learn about Senge's Five Discipline theory, they learned about "the learning organization's spiritual foundation," "turning the mirror inward," "because they want to, not because they have to," "genuine thinking together," and "invisible fabrics of interrelated actions" (EDLD 8810, session one, 2001). The theory was reinforced through in-class activities, communication, and practice such as closed eyes retrospection of each student's past; use of slogans or metaphors to describe one's self and one's fellow cohort member, discussion about leaders among us, and the laws of the Fifth Discipline. Students applied what they learned to their project called "Expectations for Professional Visioning." It included a leadership framework

(philosophy of education, philosophy of leadership, vision for professional growth, and five-year goals), strategic plan for vision attainment, and artifacts.

Based on what they learned in the cohort session, each student came out with his/her own philosophy about education and leadership. The following (Table 1) shows some of the students' beliefs and philosophies in education and leadership:

Table 1. Education and leadership philosophy

| Educational Philosophy | Leadership Philosophy |
|---|---|
| • All students can learn<br>• Different learning strategies can insure positive learning outcomes<br>• A combination of existentialism and perennialism<br>• Learning is students-centered focus<br>• Methodology should be practical, pragmatic and flexible<br>• Learning is not restricted to the classroom<br>• The school climate should help each child develop a respect and appreciation for himself/herself, others, and his/her country<br>• Life-long learners<br>• Self-sufficient, adoptable, law-abiding citizens to a democratic, ever-changing world<br>• Human beings are learning beings; education can accelerate children's growth intellectually and morally. | • Pragmatism and situational leadership<br>• "The 21 Irrefutable laws of leadership"*<br>• Situational and delegation<br>• Two or more heads are better than one in deciding a solution<br>• Motivation, decision making, and communication skills<br>• A leader must have theoretical and practical knowledge of the organization that is to be led<br>• Democratic spirit with the ability of cooperation and expert knowledge<br>• Learn to follow<br>• Be an example<br>• Openness to reflections<br>• A leader should have a fervor for the process of learning and administration for the many facets of the institute of education<br>• Welcome diverse opinions |

*** See the attachment**

Using forward thinking, cohort members formulated a vision of a bright future. They did this by forming a five-year strategic plan including decision making, encouragement, initiation, and facilitation of change, and Senge's (2000) Five Disciplines

of personal mastery, mental models, shared vision, team learning, and systems thinking. The process of reaching their goal was a process of meeting challenges, experiencing failures, and embracing creativity within their personal growth; since their plans pertained to their real work situations, students completed them based on the frames of the ladder of inference and they believed that they would fulfill this long-term plan. Although their strategic plans were more personally oriented than institutionally, cohort students did consult their mentors, advisors, and peer colleagues for more realistic outcomes with less errors; the consultation itself reflected the characteristic of team learning. Each student felt satisfied with what he/she proposed in the plan since it consolidated visions from the past, the perspective of the present, and the full scope of aspirations for the future.

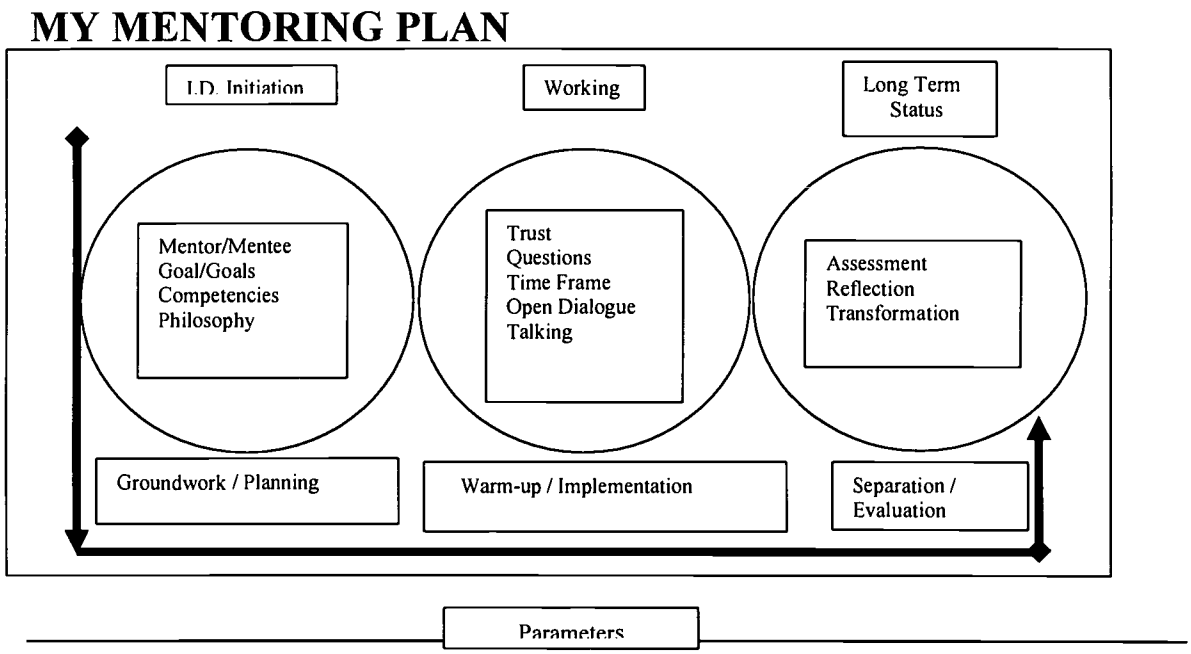
Team Learning

According to Senge (2000), the core discipline of team learning starts with dialogue and empowers the members of a team to suspend assumptions so that they could enter into a genuine and authentic thinking process together. As a discipline, team learning indicates the perspectives of sharing, support, brainstorming, cohesiveness, and holistic consideration in facing any challenge. Team learning in an organization reflects individuals' concerns, questioning, dialogue, and active participation in their organization's reformation and development.

After a presentation on mentoring was given to the cohort by the Interim Dean of the College of Education, we began our own research. First, we read and presented an article on mentoring to the class, then together we worked out a sketch of our mentoring plans (Figure 2 below) according to the combined inputs of our cohort students and

Senge's Five Disciplines; we called this our "mentoring framework." One of the significances of this framework stresses the transformation of mentoring. There are at least two meanings of transformation here, one is the mentor to mentee transition, and this reveals personal mastery. Another is in regards to the mentee becoming a mentor later in his/her career and having his/her own mentee(s); thus, the mentor/mentee relationship goes back to a new start. The spiraling relationship between mentor and mentee will go through this process generation by generation.

Figure 2. The framework of mentoring




After a whole semester's research, reading, discussion, sharing, and reflection, each student, based on his/her own situation, worked out his/her own professional mentoring plan. Students mentoring plans reflected Senge's Five Disciplines from different perspectives. Here is the abstract from a cohort student's mentoring plan:

"Before I came to Tuskegee University, I knew that I wanted to be an administrator in higher education. In order to accomplish this goal, I had to have a mentor. I was searching for a mentor who had certain personal attributes that I could further develop. I believed that if I polished my personal skills, then my professional skills would follow. These personal skills included: patience, sensitivity, compassion, and integrity. The professional characteristics that I wanted to develop were cooperation, sound judgment, competence, self-reflection, guidance, and confidentiality. Most of the personal and professional I wanted to adopt were based on my professional training as a counselor."

"Critical thinking skills are essential to my philosophy of educational leadership. A characteristic of leadership in education is the ability to analyze the subject matter at hand. One should explore all angles of a problem and ask for input from colleagues before making a critical decision. Successful educational leaders also lead by example. One's personal desires, at times, must be sacrificed in order to meet the needs of colleagues. In addition, I believe that effective leaders have an uncanny ability to forecast and respond to change. When changes occur in the work place, they lead with ease. In other words, they move with the cheese! I chose the Dean of Students Affairs to be my mentor because he possessed these skills and he used them in his leadership style."

We see that this student mentioned nothing about Senge's theory, what he did is to digest Senge's theory and then assimilate it into his mentoring selection by concentrating on mentor/mentee personal/professional leadership skills. Furthermore, he developed this theory based on his belief about organizational change as dynamic and as ease. This exposed his determination and confidence to meet challenge with a positive attitude.

Systems Thinking

Systems thinking is a "...discipline [predicated on the idea that] people learn to better understand interdependency and change and thereby are able to deal more effectively with the forces that shape the consequences of their actions...[it] is based on a...body of theory about the behavior of feedback and complexity—the innate tendencies of a system that lead to growth or stability over time" (Senge, et al., 2000).

The best metaphor for understanding a system is the function of a human body's operation of digestion, circulation, and breathing. Each system has its own subsystems, but all systems function perfectly together as a whole structure to maintain the human body's operation. If this metaphor is a common and positive expression of how a system works, we should also be concerned more about its negative function when the system in faced with a specific disease or physical ailment that will affect the system. Since we live in a world with all kinds of problems, the perspective of systems thinking at least has two meanings. The first meaning is from the holistic point of view that "A system is a network of interdependent components that work together to try to accomplish the aim of the system" (Deming, 1993, p. 98). The second meaning of systems thinking is the process of evaluation, revision, and development. Any problem or challenge produced or met in a system needs our holistic analysis and diagnosis. Instead of basing our analysis on snapshots or on a linear cause and effect, we should learn to solve a problem masterfully with dynamic systems thinking and the ability to view the interrelationship and the whole interaction and process.

Many students in the cohort program reflected upon systems thinking based on how it applied to their own organizations. The following is a selection from one of our cohort students:

The military school, like all systems, is a system of interactions among its parts. The school commander keeps a close eye on feedback from recent graduates and from people in the field that are currently performing the skill. This feedback signals when changes are needed within the school (new tasks need to be taught, old tasks need to be eliminated, more students must be trained, less students must be trained, and so on). Instructor supervisors respond to the commander's guidance, to their subordinate's (classroom instructors) needs, and to the student's needs. They ensure classroom instructors rotate occasionally back to the field to keep them acquainted with new procedures and tasks that they must teach.

Instructor supervisors also provide the scheduling of classrooms and instructor staff in response to student needs and other considerations. Of course, the classroom instructor is a pivot point of the system. He or she is a first-hand judge of how to interact with students so that students can effectively learn individual tasks and the overall skill. They tailor the instruction to student needs while doing so with direction from their supervisors and the commander. The key part of the process lies within the student. He or she must interact appropriately with the instructors, the supplies, the lab experience, and so on, in order to learn and accomplish a skill. When the student doesn't understand an underlying concept, he or she will signal the instructor, either by poor grades, body language, or a verbal request for help—the instructor responds—the whole school responds. The school is therefore an interdependent system. To once again repeat Deming's idea, the military technical training school is "A system...a network of interdependent components that work together to try to accomplish the aim of the system."

Based on an institution's leadership strategy in practice, a student in the cohort shared in the class a negative example of how a director in her institution ignored the systems thinking perspective to make decisions and, as a result, how chaos happened later in the institution. The director wanted a group of young people who had obtained masters or Ph.D. degrees to fill some of the institution's leadership positions. Instead of providing enough time to train these young people in leadership, the institute arranged for them to directly fill certain leadership positions right after they graduated. Since these young people just came out of school they lacked practical experiences, even though they tried hard, they did not perform as well as the institution had expected. As a consequence, more and more problems appeared in the institution and the director finally paid the ultimate professional price, resignation from his director position. The problem was that when the director made this decision, he did not base it on the reality of the institution and ignored systems thinking in the process of decision making.

Conclusion

The doctorial cohort program at Auburn University has met its aim. It has increased collaborative practice for students and has created a cohort structure that allows students to learn from one another–it has fostered "a community of learners" (Kochan, n.d.). It is a unique program as seen through Bolman's and Deal's four frames and it has met its goals and informed students about the theoretical perspectives, such as those exampled by Senge's (2000) Five Disciplines.

Emerging Themes. There are several emerging themes that warrant mentioning and remembering as noteworthy observations of the doctoral cohort program. First, it is important to note that although the activities shared by cohort members can be framed under any one of Bolman's and Deal's (1993) four leadership frames, it is unrealistic to assume that an activity is limited to one single frame. Leadership and social interaction among people is never isolated within a single frame. Secondly, (Sally's emerging theme goes here).

Summary. This paper isolates on the Auburn University doctoral student cohort program by viewing it through Bolman's and Deal's (1993) frames and describing how students apply the theory involved Senge's (2000) Five Disciplines to their own practice. This application and practice was reflected students' within areas of recognition, retrospection, exploration, and creativity as evidenced by their projects such as expectations for professional visioning, journal reflections, and mentoring plans. Each of the student's individual project echoed his/her own personal growth, mental process of receiving information and belief formation, shared vision on leadership philosophy and style, and his/her systematic thinking capability. The perspective of team learning

strengthened students' concepts of what it meant to be part of the community of learners. The doctoral cohort program also revealed what Preskill and Torres (1999) mentioned, that "organization members come together to engage in the learning processes of (a) Dialogue, (b) Reflection, (c) Asking questions, (d) Identifying and Clarifying Values, Beliefs, Assumptions and Knowledge."

**References**

Bennis, W. (1994). *On becoming a leader.* Massachusetts: Perseus Books.

Bolman, L. & Deal, T. (1993). *The path to school leadership: A portable mentor.* Thousand Oaks, CA: Corwin Press.

Bolman, L. & T. Deal, (1997). *Reframing organizations: Artistry, choice, and leadership.* San Francisco, CA. Jossey-Bass Publishers.

Campbell, L. (2000). *Mentoring processes and functions in Supervision.* Paper presented at the Annual Conference of the American Psychological Association (108th, Washington, DC, August 4-8, 2000).

Cookbook. (2002). *Community of learners cohort cookery: Auburn University's food for thought.* Keaney, NE. Cookbooks by Morris Press.

Cindy Reed. (2001). Doctoral seminar and alternative residency seminar handout, Summer, 2001. Auburn University.

Darwin, A. (2000). Critical relections on mentoring in work settings. *Adult Education Quarterly.* 50, 197-202

Deming, W. E. (1993). *The new economics for industry, government and education.* MIT Center for Advanced Engineering Study, Cambridge, Massachusetts.

Funk, F., & Kochan, F. K. (1999). Profiles in mentoring: Perspectives from female school and university voyagers. In C. A. Mullen & D. W. Lick (Eds.), *New directions in mentoring* (pp. 78-103). London: Falmer Press.

Galbraith, M. (2001). Mentoring development for community college faculty. *Michigan Community College Journal: Research & Practice.* 7(2), 29-39.

Garvey, B. & Alred, G. (2000). Developing mentors. *Career Development International.* 5 (4-5), 216-238.

Huling, L. & Resta, V. (2001). Teacher mentoring as professional development. (Report No. EDO-SP-2001-4). Office of Educational Research and Improvement (ED), Washington, DC. (ERIC Document Reproduction Service No. ED460125)

Kochan, F., Reed, C., Twale, D., & Jones, V. (1999). *Restructuring and educational leadership program: A journey from organization to community.* (ERIC Document Reproduction Service No. ED427415).

Kochan, F. K. & Trimble S. (2000). From mentoring to Co-mentoring: Establishing collaborative relationships. *Theory into Practice.* 39(1), 20-28.

Koshan, F. K. (n.d.). The education leadership seminar. Unpublished manuscript, Auburn University.

Kowch, E., & Schweir, R. (1997). *Building learning communities with technology.* Paper presented at the Second National Congress on Rural Education, Saskatoon, Saskatchewan.

Lakoff, G. & Johnson, M. (1980). *Metaphors we live by.* Chicago, IL. University of Chicago Press.

Linder, P. & Foote, M. (2002). Why should we care about family literacy? Preservice and mentor teachers' awareness. *Journal of Reading Education.* 27(2), 8-16.

MAXXIS Company. (2000). Definition. Retrieved on Sept. 10, 2002 from http://www.maxxis2000.com/biz_opp.cfm?ShowContent=Who_3

Nannus B. (1992). *Visionary Leadership.* California: Jossey-Bass Publishers.

Podsen, I. & Denmark, V. (2000). *Coaching & mentoring first-year and student teachers.* New York: Eye on Education.

Preskill H. & Torres R. (1999). *Evaluative inquiry for learning in organization.* California: Sage Publications.

Rowley, J. (1999). The good mentor. *Educational Leadership.* 56(8), 20-22.

Robert, A. (1999). Homer's Mentor Duties Fulfilled or Misconstrued. Retrieved on Sept. 8, 2002 from http://home.att.net/~nickols/homers_mentor.htm

Sarason, S. (1990). *The predictable failure of educational reform.* San Francisco: Josey-Bass.

Schon, D. A. (1983). *The reflective practitioner.* New York: Basic Books.

Schubert, W. (1986). *Curriculum: Perspective, paradigm, and possibility.* New York, NY. Macmillan Publishing Company.

Senge, P. M. (1990). *The fifth discipline.* New York: Doubleday.

Senge, P. M., Kleiner A., Roberts, C, Ross, R.B., & Smith, B. J. (1994). *The fifth discipline fieldbook.* New York: Currency Doubleday.

Senge, P. M., Cambron-Mccabe, N., Lucas, T., Smith, B., Dutton, J. & Kleiner, A. (2000). *Schools that learn: A fifth discipline fieldbook for educators, parents, and everyone who cares about education.* New York: Currency Doubleday.

Sergiovanni, T. (1994). *Building community schools.* San Francisco: Josey-Bass.

Sergiovanni, T. (1992). Moral leadership: Getting to the heart of school improvement. SanFrancisco: Josey-Bass.

Twale, D, Kochan, F, & Sabo, D. (n.d.). A model of leader preparation: Theory to practice. Auburn University.

Wang, J. (2001). Contexts of mentoring and opportunities for learning to teach: A comparative study of mentoring practice. *Teaching & Teacher Education.* 17(1), 51-73.

Weick, K. E. (1995). *Sensemaking in organizations.* Thousand Oaks, CA: SAGE.

Willen, L. (2001). Getting Personal. *Journal of Staff Development.* 22, 47-49.

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**Attachment**

1. **The Law of the Lid**
   *Leadership ability determines a Person's level of effectiveness*

2. **The Law of Influence**
   The *true measure of Leadership Is Influence—Nothing more, nothing less*

3. **The Law of Process**
   *Leadership develops daily, not in a day*

4. **The Law of Navigation**
   *Anyone can steer the shi, but it takes a leader to chart the course*

5. **The Law of F. F. Hutton**
   *When the real leader speaks, people listen*

6. **The Law of Solid Ground**
   *Trust is the foundation of leadership*

7. **The Law of Respect**
   *People naturally follow leaders stronger than themselves*

8. **The Law of Intuition**
   *Leaders evaluate everything with a leadership bias*

9. **The Law of Magnetism**
   *Who you are is who you attract*

10. **The Law of Connection**
    *Leaders touch a heart before they ask for a hand*

11. **The Law of the Inner Circle**
    A *Leader's Potential is determined by those closest to him*

12. **The Law of Empowerment**
    *Only secure leaders give power to others*

13. **The Law of Reproduction**
    ***It** takes a leader to raise up a leader*

14. **The Law of Buy-In**
    *People buy into the leader, then the vision*

15. **The Law of Victory**
    *leaders find a way for the team to win*

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